

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/678,307	10/06/2003	.Takuya Uryu	Q77723	4128		
23373	7590 02/03/2005		EXAM	EXAMINER		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W.			BASTIANELLI, JOHN			
SUITE 800	EVINANTIVENOE, IV. W	ART UNIT	PAPER NUMBER			
WASHINGTON, DC 20037			3751			
			D. (TE.) () (1 CD. 00/00 (000)	DATE MAIL ED. 02/02/000		

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)				
		10/678,30	7	URYU ET AL.				
	Office Action Summary	Examiner		Art Unit				
		John Basti	anelli	3751				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on	06 October 2003] .					
2a)□	2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4) ☐ Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.								
Applicati	ion Papers							
9)	The specification is objected to by the Exa	aminer.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
•								
2) Notice 3) Infor	ct(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-9- mation Disclosure Statement(s) (PTO-1449 or PTO/ er No(s)/Mail Date 10/6/03, 11/19/04		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	O-152)			

Application/Control Number: 10/678,307 Page 2

Art Unit: 3751

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Voss et al. DE 199 36 711 A1 (US 6,644,623 used for translation).

Voss discloses a solenoid valve having a solenoid main body (Fig. 2a) including a coil (claim 1), a valve seat member 7 having a seat portion, a valve element 4 that is displaced in accordance with a current applied to the coil so as to be brought into and out of contact with the seat portion, and a valve guide portion 3(1) that is arranged coaxially with the seat portion and guides the displacement of the valve element, a housing 6 attached to the solenoid main body so that a space is formed between the housing and the valve seat member, and forms an input/output flow path of a fluid; and a seal member 28 that is made of an elastic material and is provided in the space. The valve seat member has a cylindrical shape, is fitted and welded 21 and fixed around an outer peripheral surface of the guide portion. The valve seat member and valve guide portion are seen to be formed integrally with the valve seat member as it is fixed and therefore formed integrally.

Application/Control Number: 10/678,307 Page 3

Art Unit: 3751

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Alternatively, claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Voss et al. DE 199 36 711 A1 (US 6,644,623 used for translation).

Voss lacks an integrally formed valve guide and valve seat. Mayer discloses an integrally formed valve seat member and valve guide portion 8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the valve guide and seat of Voss integrally formed as disclosed by Mayer, since it has been held that forming in one piece an article which has been formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893) and this would provide reduced assembly costs as it would no longer need to be fixed together.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsushima, Torii, Hofmann, Mayer, Linhoff, Fochtman, Hohl, Kamiya, and Herion disclose solenoid valves with a seal member between a housing and a valve seat member and having a valve guide portion.

Art Unit: 3751

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Bastianelli whose telephone number is (571) 272-4921. The examiner can normally be reached on M-F (9:00-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Bastianelli Primary Examiner

Art Unit 3751

JВ

February 1, 2005